

EXECUTIVE SUMMARY

On 16 August 2003, at 2221 CDT, a T-1A, S/N 91-0093, assigned to the 47 FTW, Laughlin AFB, TX, departed Runway 21 at Keesler AFB, MS, during landing rollout. The aircrew consisted of the Mishap Instructor Pilot (MIP), and Mishap Student Pilot (MSP), both assigned to the 86 FTS, Laughlin AFB, TX, Their call sign was RAKE 26. The mishap occurred while on a Specialized Undergraduate Pilot Training (SUPT) cross-country training mission. Neither crewmember was injured. The aircraft sustained substantial structural damage to the landing gear, forward fuselage and both wings. Total damage is estimated at \$2.5 million. There were no military or civilian injuries or fatalities and no civilian property damage.

The MSP was flying an Instrument Landing System (ILS) approach to Runway 21. They were in Visual Meteorological Conditions (VMC) at night and the runway was wet. After some deviations on the approach, they arrived over the threshold on a normal glide slope and faster (about 114 kts) than the computed approach speed of 108 kts. The aircraft touched down approximately 1500 feet down the runway. The MIP actuated the speed brakes/spoilers switch and the MSP began to immediately apply brake pressure. After 4-5 seconds, the MIP recognized that the aircraft was not decelerating and declared that she was taking control of the aircraft. The MIP immediately applied maximum braking with no perceived deceleration. She then grabbed the glare shield in an attempt to gain additional leverage on the brakes and again felt no perceived deceleration. At this point, the aircraft was rapidly running out of available runway. The MIP selected the emergency brakes just prior to arriving at the departure end threshold and the brakes locked resulting in a hydroplane skid. The aircraft departed the prepared surface and came to a halt 190 feet later. As a result of the runway departure, the right main and nose gear collapsed, and the forward fuselage and both wings were heavily damaged. Neither crewmember was injured and they egressed the aircraft safely.

I find clear and convincing evidence that this mishap was caused by a combination of several factors during the landing sequence. First, the MSP flew faster than the computed approach and landing speeds. Additionally she maintained higher than idle thrust for the first few seconds after touchdown. Because of these factors, the aircraft did not settle completely on the runway after touchdown—as the struts were not completely compressed. This put the aircraft systems in the “AIR” mode meaning that the speed brakes/spoilers could not deploy. Finally, the runway was wet; and the crew was inexperienced and thus did not recognize the anti-skid cycling at high speeds on the wet runway.

Under 10 U.S.C. 2254(d) any opinion of the accident investigators as to the cause of, or the factors contributing to, the accident set forth in the accident investigation report may not be considered as evidence in any civil or criminal proceeding arising from the accident, nor may such information be considered an admission of liability of the United States or by any person referred to in those conclusions or statements.